

The web of life

People are a part of the environment – not apart from it.

Themes	Environment, Globalisation, General human rights
Complexity	Level 2
Group size	10+
Time	30 minutes
Overview	In this activity, people brainstorm links in a global food web. They explore: <ul style="list-style-type: none"> ▪ The interdependency of living and non-living things and ▪ The inevitable impact of all human activity on the environment, and the consequences.
Related rights	<ul style="list-style-type: none"> ▪ The right to own property ▪ The right to a healthy environment ▪ The right to development
Objectives	<ul style="list-style-type: none"> ▪ To know about the interdependency of living and non-living things ▪ To appreciate the implications of human activity on ecosystems ▪ To develop respect for the intrinsic value of life
Materials	<ul style="list-style-type: none"> ▪ A ball of thin string or strong wool ▪ A pair of scissors

Instructions

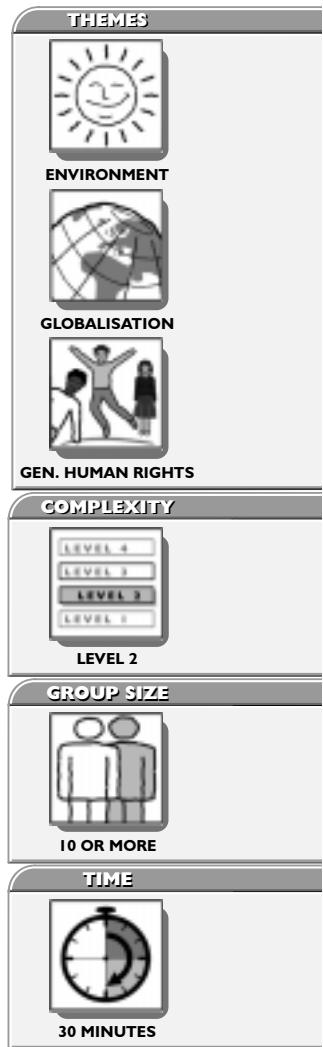
This activity is divided into 2 parts: 1 - building the web of life, part 2 - its destruction.

Part 1

1. Ask people to stand in a circle.
2. Explain that they are to build a model of the web of life.
3. You start. Hold the ball of string in your hand and name a green plant, for instance a cabbage.
4. Hold onto the end of the string and throw the ball to someone across the circle. They catch it! There is now a straight line of string between the two of you.
5. This person has to name an animal that eats cabbages, for instance, a caterpillar. They then hold onto the string and throw the ball to a third person across the circle.
6. This third person has to think of an animal that eats caterpillars, for instance, a bird, or if they know one, they can say a species of bird, such as a thrush. They then throw the ball to a fourth person.
7. Continue the game, so the ball of string passes back and forth across the circle until you have created a criss-cross mesh that represents the "web of life".

Part 2

1. Take the scissors and ask people to give specific examples of what is damaging this web of life, for instance, motorways being built over farmland, or over-fishing of cod.
2. For each example make one cut in the string web.



Debriefing and evaluation

- Start with asking how people feel seeing the web destroyed and then go on to talk about the issues involved and what needs to be done to protect the environment
 - What did you feel as you saw the web gradually being destroyed?
 - Was it easy to name animals and plants in different food webs? How good is people's knowledge of natural history?
 - Whose responsibility is it to protect the environment?
 - The balance of nature is very complex and it is not easy to predict what the global consequences of any particular action will be. How then is it possible to make decisions about how we use the earth's resources? For example, how can people make decisions about whether to cut down a forest so the land can be used for growing crops?
 - Article I of the International Covenant on Economic, Social and Cultural rights states that "all peoples may, for their own ends, freely dispose of their natural wealth and resources." Does this mean that people have a right to use the environment?
 - We rely on our environment to provide us with food to eat and clean air to breathe. Without a healthy environment we could not live, it is a condition for life. Do we therefore have a paramount duty to respect the environment that limits our rights to use it? (In the same way that we have a duty to respect rights and freedoms of others, which limits our own rights as individuals.)
- End with a short brainstorm of environmental success stories. It is not all hopeless! There are lots of people active all over the world, working to ensure that a sustainable environment is held in trust for future generations.

Tips for facilitators

- Each food chain should illustrate actual or possible relationships. For example, grass – sheep – humans. Or plankton – whales. Or plankton – herrings – pigs (pigs are often fed fishmeal) – humans – tiger! Remember that when an animal dies, bacteria decay its body and the minerals released are taken up by other green plants. Thus the cycle of life begins over again. Billions of such cycles interlink to make the web of life.

- Try to get people to think of as many different food chains as possible. Think about examples in woodland, forest, mountain, moorland, marsh, pond, river and marine habitats. You may need to intervene by saying something like, now the minerals get washed to the sea and get used by marine phytoplankton (plant plankton)." Or to move from a marine ecosystem to a terrestrial one you may have to say, now the seagull that ate the shore crab flew inland to scavenge over farmland where it died". If a player can-not think of the next link, suggest they may ask others in the group for suggestions.

- In part 2, when you cut the string, make cuts at random in different parts of the web. The first few cuts will not make much difference because of the way the threads criss-cross over each other hold the web more or less together. However, as you make more cuts the web will gradually disintegrate and eventually you will be left with a heap of threads lying on the floor surrounded by a circle of people each holding a small, useless strand.

- In part 2 of the activity you will have to be prepared for some controversial answers to the question "what is damaging the web?" Some people, for instance, vegetarians, may say that people eating meat damages the web. You should acknowledge the point of view and ask the

other players for their opinion. However, be careful not enter a big debate at this stage; finish the game first and then return to it at the end in the debriefing and discussion.

Try not to get bogged down in the discussion, but keep the aim of the activity, that the effect of human activity on the environment, in mind.

The destroyed web is a very powerful image. It is therefore essential that you leave time to follow on with at least a short brainstorm or discussion about the progress that is currently being made to protect the environment. You should also add points about what else can be done, including what they can do. The global situation is indeed depressing, but it is important that people do not feel helpless in the face of the task ahead.

You may want to read the background information on page 350 before asking the questions about the relationship between human rights and the environment.

This is a good activity to do with a science class.

Key dates

22 March
World Day of Water

22 April
Earth Day

Suggestions for follow-up

This activity can be used as a starter for a debate about human rights and environment. For example, would it be a good idea if there were a human right to the environment, like there are other human rights? Does the environment have value over and above its instrumental value? Does it make sense to give animals rights?

Developing the sustainable use of resources requires political will, time, effort and money. Think how much more all countries could do by way of environmental education, scientific research and practical environmental protection schemes if they did not spend so much on armaments and the military. If the group would like to explore those issues further, they could do the activity "Money to spend", on page 177.

Ideas for action

Get involved with local environmental projects. Contact Youth and Environment Europe (YEE). YEE is the umbrella organisation for over forty regional and national self-governing youth organisations involved in the study and conservation of nature and environment throughout Europe. www.ecn.cz/yee/.

Contact a local environmental organisation and ask to find out more about how to be an environmentally friendly consumer.

Further information

In nature everything is connected to everything else. All living things and non-living things are linked through cycles, for example, the carbon cycle and the water cycle. Food chains are part of these cycles. A food chain starts when a green plant uses light energy from sunshine, minerals in the soil and water to build their own food to give them energy to live and to grow. When a green plant, for instance, a cabbage gets eaten, the minerals and energy stored in the leaves are passed on and used, for instance, by the caterpillar to live and grow. As each animal in turn is eaten by another the energy and minerals get passed on through the food chain. When the animal at the top of the food chain dies, its body decays as it is "eaten" by bacteria. The minerals that were in the body are taken up by green plants and a new food chain begins.